

AMENDMENTS TO THE SPECIFICATION

In the Specification:

Please delete the paragraph on page 51, lines 12-13 and replace it with the following paragraph:

--Figure 1 shows multiple sequence alignment (Clustal W) of human PLK1 (P53350) (SEQ ID NO: 4), PLK2 (Q9NYY3) (SEQ ID NO: 5), and PLK3 (Q9H4B4) (SEQ ID NO: 6).--

Please delete the paragraph on page 51, line 20 and replace it with the following paragraph:

--Figure 3 shows sequence alignment of PLK1 (SEQ ID NO: 7) and PKA (SEQ ID NO: 8) kinase domains.--

Please delete the paragraph on page 55, lines 3-15 and replace it with the following paragraph:

--The human PLK1 (SwissProt accession number P53350, [44]) open reading frame (ORF) was amplified by PCR from a human foetal lung cDNA library (Clontech). An Nhe I restriction endonuclease site was introduced upstream of the ORF, by inclusion in the sense PCR primer. An Eco RI restriction endonuclease site was introduced downstream of the ORF, by inclusion in the antisense PCR primer. The PCR product generated was cloned into pCR4-Topo (Invitrogen), and sequence. The ORF was then sub-cloned as an Nhe I/Eco RI fragment into pSSP1, a derivative of bacmid transfer vector pFastBac HTa (Invitrogen). The PLK1 ORF was cloned into pSSP1 such that the resulting PLK1 translation product would have a 19 amino acid N-terminal tag (MSYYHHHHHHGMASDDDDK) (SEQ ID NO: 1) containing a hexahistidine tag and an enterokinase cleavage site. The pSSP1-Plkl expression cassette was transferred into bacmid DNA by transposition in E. coli DH10Bac (Invitrogen). Purified recombinant bacmid DNA was transfected into Sf9 cells, to produce an infective stock of recombinant baculovirus.--

Please delete the paragraph on page 56, lines 8-12 and replace it with the following paragraph:

--Using standard techniques, a full-length Cdc25C clone was isolated by PCR from HeLa mRNA and inserted on a BamHI-HindIII fragment into pRsetA. The amino terminal Cdc25C

fragment (encoding residues 1-300) was excised from this vector and inserted into pET28a (between the NcoI and BamHI sites). Expression was under the control of the T7 promoter, and the encoded protein contains a His6 (SEQ ID NO: 2) tag at the carboxy terminus.--

Please delete the paragraph on page 57, lines 16-26 and replace it with the following paragraph:

--Human recombinant CKII activity was assayed using the peptide H-Arg-Arg-Arg-Glu- Glu- Glu-Thr-Glu-Glu-Glu-OH (SEQ ID NO: 3) as a substrate. The assays were carried out using 96-well microtitre plates by incubating the peptide substrate (10 μ M) with 20 Units/well of CKII (New England Biolabs) and varying concentrations of the candidate compound in a total volume of 25 μ L of 25 mM MOPS buffer pH 7.0, supplemented with 25 mM p- glycerophosphate, 5 mM EGTA, 1 mM DTT, and 1 mM NaVO₃. Reaction was initiated by the addition of 100 μ M ATP and 0.25 μ Ci of [γ -³²P]-ATP. The reaction mixture was incubated at 30 °C for 15 minutes, then stopped with 75 mM aq orthophosphoric acid, transferred onto a 96-well P81 filter plate (Whatman), dried, and the extent of peptide phosphorylation was assessed by scintillation counting using a Packard TopCount plate reader.--

Sequence Listing

Please incorporate the paper copy of the Sequence Listing enclosed herewith immediately following the specification.